PTO/SB/17 (12-98)

Approved for use through 09/30/2000. OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL FOR FY 2002

Patent fees are subject to annual revision.

Small Entity payments <u>must</u> be supported by a small entity statement,
Otherwise large entity fees must be paid. See Forms PTO/SB/09-12.

TOTAL AMOUNT OF PAYMENT (\$)1322.00

Complete if Kn wn						
Application Number		10				
Filing Date	December 19, 2001	٠. م				
First Named Inventor	James G. Fleming	8.0				
Examiner Name		3.5				
Group / Art Unit		7.8				
Attorney Docket No.	SD6942/S97581	ည်				

METHOD OF PAYMENT (check one)	FEE	CAL	CUL	ATIO	N (continued)	
The Commissioner is hereby authorized to charge	-	DITIO				
1. indicated fees and credit any over payments to:	Large Fee	ee Fee I Fee Fee Descrir		Fee Description	Fee Paid	
Deposit Account Number 19-0131	Code	(\$)	Fee Cod	(\$)	1 co Description	raio
			e	-	. 1	
Deposit Account Name Sandia Corporation	105	130	205	65	Surcharge – late filing fee or oath	
Charge Any Additional	127	50	227	25	Surcharge – late provisional filing fee or cover sheet	
Fee Required Under	420	420	420	130	Non-English specification	
37 CFR 1.16 and 1.17 2. Payment Enclosed:	139	130	139			
Check Money Order Other	147	2,520	147	2,520	For filing a request for reexamination Requesting publication of SIR prior to	
FEE CALCULATION	112	920*	112	920*	Examiner action	
1. BASIC FILING FEE	-113	1,840	11	1,840	Requesting publication of SIR after Examiner	
Large Entity Small Entity Fee Fee Fee Description Fee	115	110	215	55	Extension for reply within first month	
Code (\$) Code (\$)	116	400	216	200	Extension for reply within second month	
101 740 201 370 Utility filing fee 740	117	920	217	460	Extension for reply within third month	
106 330 206 165 Design filing fee	118	1.440	218	720	Extension for reply within fourth month	
107 510 207 255 Plant filing fee	1	1,960	228	980	Extension for reply within fifth month	
108 740 208 370 Reissue filing fee	128	•				· ·
114 160 214 80 Provisional filing fee	119	310	219	155	Notice of Appeal	
SUBTOTAL (1) \$ 740	120	310	220	155	Filing a brief in support of an appeal	
2. EXTRA CLAIM FEES	121	270	221	135	Request for oral hearing	
Fee from Extra Claims below Fee Paid	138	1,510	138	1,510	Petition to institute a public use proceeding	<u> </u>
	140	110	240	55	Petition to revive - unavoidable	
Total Claims 43 -20**= 23 X 18 = 414	141	1,240	241	620	Petition to revive - unintentional	
Independent 5 - 3**= 2 X 84 = 168	142	1,240	242	620	Utility issue fee (or reissue)	
Multiple Dependent =	143	440	243	220	Design issue fee	
·	144	600	244	300	Plant issue fee	
	122	130	122	130	Petitions to the Commissioner	
	1			•	Petitions related to provisional applications	
Car Balanca and halland	123	50	123		,	
**or number previously paid, if greater, For Reissues, see below. Large Entity Small Entity	126	240	126		Submission of Information Disclosure Stmt	
Fee Fee Fee Fee Fee Description Code (\$) Code (\$)	581	40	581	40	Recording each patent assignment per property (times number of properties)	
103 18 203 9 Claims in excess of 20	146	710	246	355	Filing a submission after final refection	
102 84 202 42 Independent claims in excess of 3][(37 CFR 1.129(a))	
104 280 204 140 Multiple dependent claim, if not paid 109 84 209 42 **Reissue independent claims	149	710	249	355	For each additional invention to be examined (37 CFR 1.129(b))	
over original patent	l	Othe	r fee (specify)	
110 18 210 9 **Reissue daims in excess of 20 and over original patent		Othe	r fee (specify)	
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	1	*Re	duced	l by Ba	sic Filing Fee Paid SUBTOTAL (3) (\$)	
SUBTOTAL (2) (\$)582	1					

SUBMITTED	BY		Complete (if applicable)		
Typed or Printed Name	KEVIN W. BIEG		Reg. Number	40,912	
Signature	level Dag	Date 12 18 61	Deposit Account User ID	19-0131	

Form PTO-1449 (SNL-Modified) (2-91)

List of Patents and Publications

for Applicant's

Information Disclosure Statement

Atty Docket No: SD6942/S97581

Serial Number:

APPLICANT: Fleming et al.

(use several sheets if necessary) GROUP: FILING DATE: December 18, 2001

REFERENCE DESIGNATION

Ex'r Init	Document No.D Document No.D Document No.D	ate Nam Foreign F	atent Documents	Sub Class Class Sub Class Class	 File I Trans Yes	Date Slation X No
SP JAA	6,020,272	2/1/00	Fleming			
SP JAB	5,995,696	11/30/99	Miyagi et al.			
SB IAC	5,815,627	9/29/98	Harrington			
SPIAD	4,688,893	8/25/87	Lackmann	•		
\mathscr{S} IAE	WO 00/22466	4/20/00	Fink et al.			
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OTHER ART (I	inciuaing	Author,	ııııe,	Date,	rennem	rayes,	L. (C.)

JP | BA | Jackson, J.D., Classical Electrodynamics, John Wiley \$ Sons, Inc., NY, pp218-221 (1962)

| BB | Nishihara et al., "Low-loss parallel plate waveguide at 10.6 μm," Appl. Phys. Lett. 25, 391 (1974)

IBC | Yeh et al., "Theory of the Bragg fiber," J. Opt. Soc. Am. <u>68(9)</u>, 1196 (1978)

| BD | Harrington et al., "Review of hollow waveguide technology," SPIE 2396, 4 (1995)

| BE | Fink et al., "A Dielectric Omnidirectional Reflector," Science <u>282</u>, 1679 (1998)

| Fink et al., "Guiding Optical Light in Air Using an All-Dielectric Structure," J. Lightwave Tech. 17(11), 2039 (1999)

BG | Ibanescu et al., "An All-Dielectric Coaxial Waveguide," Science 289, 415 (2000)

MIBH | Miura et al., "Hollow Optical Waveguide for Temperature-Insensitive Photonic Integrated Circuits," Jpn. J. Appl. Phys. 40, L688 (2001)

PIBI | Deopura et al., "Dielectric omnidirectional visible reflector," Optics Letters 26(15), 1197 (2001)

Examiner: Sure Pale Date Considered: 9/21/03

10/025447



12-26-01

SD6942/S97681

SD6942/S97681 Express Mail No.: EL026586509US



UTILITY PATENT APPLICATION TRANSMITTAL Under 37 CFR 1.53(b)

Transmitted herewith	for filing	is the	patent	application of
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INVENTOR(S): James G. Fleming, Shawn-Yu Lin, and G. Ronald Hadley

FOR: MICROFABRICATED BRAGG WAVEGUIDE

I. APPLICATION ELEMENTS

1.	\boxtimes	Fee Transmittal Form (original + duplicate)
2.	\boxtimes	Specification Total Pages26
3.	\boxtimes	Drawings Total Sheets <u> 8</u>
4,		Oath or Declaration (with Power of Attorney) Total Pages 3 a. Newly Executed b. Copy from Prior Application (Continuation or Divisional)
		Deletion of Inventors Signed Statement Attached Deleting Inventor(s) named in prior Application. 37 CFR 1.63(d)(2) and 1.33(b).
5.		Incorporation by Reference (if Box 4b is checked). The entire disclosure of the prior application(s) from which a copy of the Oath or Declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
6	П	Microfiche Computer Program (Appendix)

II. ACCOMPANYING APPLICATION PARTS

•	7.		Assig	nment F	apers (cov	er s	heet and d	ocume	ent(s)
1	8.				b) Stateme is an assig)	\boxtimes	Power of Attorney (with the Declaration)	
!	9.			mation D /PTO-14	isclosure 9 149	ement	\boxtimes	Copies of IDS Citations	
	10.		Prelir	minary A	mendment				
	11.		Retur	n Recei	pt Postcard	d (Ite	emized)		
	12.		Other	r					
III. IF	A CON	<u>ITINUI</u>	NG AI	PPLICA	<u> </u>				
[□ Co	ntinuat	tion	☐ Div	visional		☐ Continua	tion-ir	n-Part (CIP)
				of prio	r applicatio	on <u>N</u>	0.		
IV CO	RRFS	POND	FNCF	ADDRE	ss				
:	Sandia P. O. I	a Natio Box 58	nal La 00 - N	iboratori IS-0161		31			
	Phone FAX:	: (505 (505		-8600 I-1418					
Dated:		121	ıela	ol	-	S F F	Patent & Lic P. O. Box 5	onal L censin 800 / I e, NM	aboratories g Center, 11500 MS 0161 87185-0161

CERTIFICATION UNDER 37 CFR 1.10

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the U. S. Postal Service on the 19th day of December, 2001, in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EL026586509US, addressed to the: Assistant Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

Marilynn Gabel

PTO/SB/35 (11-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U. S. DEPARTMENT OF COMMERCE

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NONPUBLICATION REQUEST UNDER

35 U.S.C. 122(b)(2)(B)(i)

First Nam	ed Inventor	James G. Fleming			
Title	Microfabricated Bragg Waveguide				
Atty Dock	et Number	SD6942/S97581			

I hereby certify that the invention disclosed in the attached application has not and will not be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing.

I hereby request that the attached application not be published under 35 U.S.C. 122(b).

12/18/01 Date

Control Design

Kevin W. Bieg, Reg. No. 40,912 Typed or printed name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application **upon filing**.

Application may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant **must** notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. **Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).**